by a plotter, an ink jet printer, radiation with light, bombardment with particles, stamping or soft lithography.--

## REMARKS

By present amendment, claims 1-22 were amended to place them in U.S. format, to eliminate multiple dependencies, and to incorporate amendments made during the International prosecution. As a result, new claims 23-32 were added. Claims 23-25 is similar in scope to claim 19. Claims 26-28 are similar in scope to claim 20. Claims 29-31 are similar in scope to claim 21. Claim 32 is similar in scope to claim 22. After entry of this Amendment, claims 1-31will be pending in the application, with claim 1 being independent.

### Compliance with 37 C.F.R. § 1.125

A substitute specification, excluding claims, under 37 C.F.R. § 1.125(b) is submitted herewith. Applicants state that all amendments to the specification have been made solely to place the specification in U.S. format, including inserting headings and subheadings, correcting spelling, using idiomatic English, and clarifying terms throughout the specification. In accordance with 37 C.F.R. § 1.125(b)(1), Applicants state that the substitute specification does not contain new matter. In accordance with 37 C.F.R. § 1.125(b)(2), Applicants also enclose a marked up copy of the substitute specification showing all the changes to the specification of record.

Applicants state that in view of the amendments and remarks contained herein, the application is in condition for allowance, and a notice to that effect is respectfully requested.

## CONCLUSION

In view of the foregoing amendments and remarks, the Applicants respectfully submit that all of the claims pending in the above-identified application are in condition for allowance, and a notice to that effect is earnestly solicited.

If the present application is found by the Examiner not to be in condition for allowance, then the Applicants hereby request a telephone or personal interview to facilitate the resolution of any remaining matters. Applicants' attorney may be contacted by telephone at the number indicated below to schedule such an interview.

The U.S. Patent and Trademark Office is authorized to charge any additional fees incurred as a result of the filing hereof or credit any overpayment to our deposit account #19-0120.

Respectfully submitted,
**GÖPFERICH, Achim et al., Applicants**

October 15, 2002

By: _____

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**Version with marking to show changes to claims**

1. (Amended Once) A [B]block copolymer [containing] comprising:

a hydrophobic biodegradable polymer a),

a hydrophilic polymer b),

at least one reactive group c) for covalent binding of a surface-modifying substance d) to the hydrophilic polymer b),

wherein the at least one reactive group c) is an at least bifunctional molecule with at least one free functional group.

2. (Amended Once) The [B]block copolymer [according to] of Claim 1, [characterised in that] wherein the hydrophobic polymer a) and/or hydrophilic polymer b) are selected from the group consisting of a linear polymer, [and/or] a branched polymer, and combinations thereof.

3. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the hydrophobic polymer a) is at least one polymer selected from the group consisting of polyester, poly-ϵ-caprolactam, poly-α-hydroxyester, poly-β-hydroxyester, polyamide, polyphosphazene, polyanhydride, polydioxanon, polymalic acid, polytartaric acid, polyorthoester, polycarbonate, peptide, polysaccharide and protein.

4. (Amended Once) The [B]block copolymer [according to] of Claim 3, [characterised in that] wherein the hydrophobic polymer a) is at least one polymer selected from polylactide, polyglycolide, poly(lactide-co-glycolide), poly-β-hydroxybutyrate and poly-β-hydroxyvalerate.

5. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the hydrophilic polymer b) is at least one polymer selected from the group consisting of polyethylene glycol, polypropylene glycol, polyethylene glycol/polypropylene glycol copolymer, polyethylene glycol/polypropylene glycol/polyethylene glycol copolymer, polybutylene glycol, polyacrylamide, polyvinyl alcohol, polysaccharide, peptide and protein.

6. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the reactive group c) is at least one selected from a dicarboxylic acid amide, 3-maleic imidopropionic acid-N-succinimidyl ester and succinimidyl ester.

7. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the hydrophobic polymer a) is at least one selected from polylactide, polyglycolide and poly(lactide-co-glycolide).

8. (Amended Once) The [B]block copolymer [according to] of Claim 7, [characterised in that] wherein the hydrophilic polymer b) is polyethylene glycol.

9. (Amended Once) The [B]block copolymer [according to] of Claim 8, [characterised in that] wherein the polyethylene glycol has a molar mass in a range of 200 to 10 000 Da.

10. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the hydrophobic polymer a) is polylactide preferably with a molar mass in a range of 1 000 to 100 000 Da.

11. (Amended Once) The [B]block copolymer [according to one of the preceding claims] of claim 1, [characterised in that] wherein the surface of the block copolymer is chemically structured by binding of surface-modifying substances d).

12. (Amended Once) The [B]block copolymer [according to one] of Claim[s] 1 [to 11, characterised in that] wherein the block copolymer additionally contains at least one surface-modifying substance d), wherein substance d) is bonded to the hydrophilic polymer b) by means of the reactive group c).

13. (Amended Once) The [B]block copolymer [according to] of Claim 12, [characterised in that] wherein the substance d) is at least one substance selected from a carbohydrate, peptide, protein, heteroglycan, proteo-glycan, glycoprotein, amino acid, fat, phospholipid, glycolipid, lipoprotein, medicinal agent, antibody, enzyme, DNA/RNA, a cell, dye and molecular sensor.

14. (Amended Once) A [S]shaped body formed from [a] the block copolymer [according to one] of Claim[s] 1 [to 13].

15. (Amended Once) The [S]shaped body [according to] of Claim 14, [characterised in that] wherein the shaped body is a film, particle, three-dimensional body, porous body or a sponge.

16. (Amended Once) The [U]use of a block copolymer according to [one of] Claim[s] 1 [to 15] for the production of drug-targeting systems, drug-delivery systems, bioreactors, for therapeutic and diagnostic purposes, for tissue engineering and as emulsifier.

17. (Amended Once) The [P]process for the production of a block copolymer [according to one] of Claim[s] 12 [or 13, characterised in that] , wherein the at least one substance d) is converted with a block copolymer according to [one of] Claim[s] 1 [to 11], wherein the block copolymer is present in solution or in the solid phase.

18. (Amended Once) The [P]process according to Claim 17, [characterised in that] wherein for binding the at least one substance d), the block copolymer according to [one of] Claim[s] 1 [to 11] is used in the form of a porous shaped body.

19. (Amended Once) The [P]process for the production of a block copolymer according to [one of] Claim[s] 12 [or 13 or according to one of Claims 17 or 18 characterised in that] , wherein in a first stage, the substance d) is provided with a reactive group c) and in a second stage, the complex composed of substance d) and reactive group c) is bonded by means of the reactive group c) to the hydrophilic polymer b) of a block copolymer composed of a hydrophobic polymer a) and a hydrophilic polymer b).

20. (Amended Once) The [P]process for the production of a block copolymer according to [one of] Claim[s] 12 [or 13 or according to one of Claims 17 to 19 characterised in that] , wherein the binding of the at least one substance d) to the surface of the block co-polymer is achieved by generating a substrate pattern, and the reactive group c) is selected from 1) an at least bifunctional molecule with at least one free functional group and/or 2) a functional group.

21. (Amended Once) The [P]process according to Claim 20, [characterised in that] wherein the substance d) is applied with a locally constant or variable concentration by means of the reactive group c) on the surface of a block copolymer containing a hydrophobic component a) and hydrophilic component b).

22. (Amended Once) The [P]process according to Claim 20 [or 21, characterised in that] , wherein for binding the reactive group c) and/or the substance d) in a substrate pattern, the surface of the block copolymer is structured by a plotter, an ink jet printer, radiation with light, bombardment with particles, stamping or soft lithography.

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